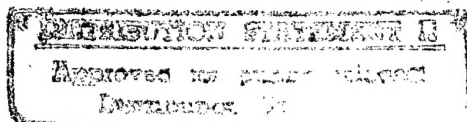


# **A SELECTIVE, ANNOTATED BIBLIOGRAPHY ON CURRENT SOUTH ASIAN ISSUES**

*February 1987*

19961202 137

DTIC QUALITY INSPECTED 4



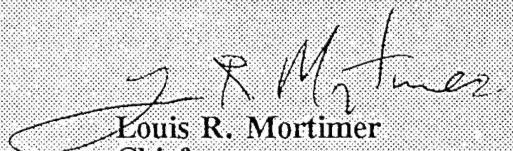
**Authors:** *Peter R. Blood  
Robert J. Levy*

Dear Reader:

This product was prepared by the staff of the *Federal Research Division* of the *Library of Congress* under an interagency agreement with the sponsoring United States Government agency.

The Federal Research Division is the Library of Congress's primary fee-for-service research unit. At the request of Executive and Judicial branch agencies of the United States Government and on a cost-recovery basis, the Division prepares studies and reports, chronologies, bibliographies, foreign-language abstracts, databases, and other tailored products in hard-copy and electronic media. The subjects researched include the broad spectrum of social sciences, physical sciences, and the humanities.

*For additional information* on obtaining the research and analytical services of the Federal Research Division, please call 202-707-9905, fax 202-707-9920, via Internet [frd@mail.loc.gov](mailto:frd@mail.loc.gov), or write to *Marketing Coordinator, Federal Research Division, Library of Congress, Washington, DC 20540-4840.*



Louis R. Mortimer  
Chief  
Federal Research Division  
Library of Congress  
Washington, DC 20540-4840

REPORT DOCUMENTATION PAGE			Form Approved OMB No. 0704-0188	
Public reporting burden for this collection of information is estimated to average 1 hour per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302, and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188), Washington, DC 20503.				
1. AGENCY USE ONLY (Leave Blank)		2. REPORT DATE <i>Feb 1987</i>	3. REPORT TYPE AND DATES COVERED Final	
4. TITLE AND SUBTITLE  A Selective, Annotated Bibliography on Current South Asian Issues			5. FUNDING NUMBERS	
6. AUTHOR(S)  <div style="display: flex; justify-content: space-between;"> <div>Peter Blood Elizabeth Curtiss</div> <div>James Heitzman Barbara LePoer</div> <div>Robert Levy Douglas Makeig</div> <div>Russell Ross</div> </div>				
7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES)  Federal Research Division Library of Congress Washington, DC 20540-4840			8. PERFORMING ORGANIZATION REPORT NUMBER	
9. SPONSORING/MONITORING AGENCY NAME(S) AND ADDRESS(ES)  N/A			10. SPONSORING/MONITORING AGENCY REPORT NUMBER	
11. SUPPLEMENTARY NOTES  Prepared under an Interagency Agreement				
12a. DISTRIBUTION/AVAILABILITY STATEMENT  Approved for public release; distribution unlimited.			12b. DISTRIBUTION CODE	
13. ABSTRACT (Maximum 200 words)  This bibliography provides selective annotations of open-source material on two current issues: nuclear developments in South Asia, and tactics and organization of Afghan resistance groups. The monthly bibliography incorporates serials and monographs arranged alphabetically by author and title within each section.				
14. SUBJECT TERMS  South Asia Afghanistan Nuclear proliferation  Insurgencies			15. NUMBER OF PAGES  <i>15</i>	
			16. PRICE CODE	
17. SECURITY CLASSIFICATION OF REPORT  UNCLASSIFIED	18. SECURITY CLASSIFICATION OF THIS PAGE  UNCLASSIFIED	19. SECURITY CLASSIFICATION OF ABSTRACT  UNCLASSIFIED	20. LIMITATION OF ABSTRACT  SAR	

## PREFACE

This bibliography provides selective annotations of open-source material on two current issues:

--nuclear developments in South Asia, and

--tactics and organization of the Afghan resistance

The bibliography incorporates serials and monographs received in the previous month and is part of a continuing series on the above subjects.

Entries within each topic are arranged alphabetically by author or title. Call numbers for materials available in the Library of Congress are included to facilitate recovery of works cited.

## CONTENTS

	<u>Page</u>
1. NUCLEAR DEVELOPMENTS IN SOUTH ASIA	
GLOSSARY OF TERMS.....	2
CITATIONS AND ABSTRACTS.....	4
2. TACTICS AND ORGANIZATION OF THE AFGHAN RESISTANCE	
GLOSSARY OF TERMS.....	11
CITATIONS AND ABSTRACTS.....	12

1. NUCLEAR DEVELOPMENTS IN SOUTH ASIA

## GLOSSARY OF TERMS

AEMC	The Atomic Energy Minerals Center at Lahore is responsible for finding and recovering uranium ore, thereby filling a vital need stemming from boycotts of Pakistan by international nuclear fuel suppliers.
BARC	Bhabha Atomic Research Centre is located in north Bombay and is India's facility for research in and development of nuclear technology.
CHASHNUPP	Pakistan's Chashma Nuclear Power Plant, a projected 900-megawatt facility in Mianwali District, Punjab, was sanctioned in 1982 in order to create electrical power through light-water technology.
Cirus	A Candu-type Canadian-built plant located at BARC, Cirus was commissioned in 1960. India reprocessed spent fuel from Cirus to make the plutonium for its 1974 "peaceful nuclear explosion;" Cirus has a capacity of 40 megawatts.
Dhruva	One of the world's few high-flux reactors, Dhruva, which went critical in August 1985, is solely the product of Indian research and production, and therefore, falls completely outside IAEA safeguards. Dhruva shares facilities with Cirus, its neighbor in the BARC, has a 100-megawatt capacity, and can produce 30 kg of plutonium annually.
IAEA	International Atomic Energy Agency (United Nations)
Kalpakkam	This Tamil Nadu town is the site of the Indira Gandhi Atomic Research Center (formerly MAPP) and gives its name to a 40-megawatt fast-breeder reactor which went critical in August 1985 using plutonium-uranium carbide fuel.

KANUPP	Karachi Nuclear Power Plant, a 125-megawatt reactor, was supplied by Canada on a turnkey basis and became operational in 1972.
MAPP-1	Madras Atomic Power Project's first Candu-type 235-megawatt unit was commissioned in January 1984. The center is located at Kalpakkam, Tamil Nadu, and was produced completely by Indian research and technology; consequently, its units and the plutonium they produce fall outside IAEA inspection safeguards. MAPP units are intended to provide electricity for Madras. In October 1985, MAPP was renamed the Indira Gandhi Atomic Research Center, but new names for individual plants have not been made public.
MAPP-2	The second unit at Madras Atomic Power Project is also a Candu-type 235-megawatt plutonium and heavy-water reactor. MAPP-2 went critical in August 1985 and was commissioned in October of the same year.
NPT	The Nuclear Nonproliferation Treaty was ratified by the UN General Assembly in 1968. India and Pakistan contend that the NPT discriminates against nonnuclear states, but Pakistan has repeatedly offered to sign if India will do so simultaneously. In the UNGA, Islamabad voted in favor of the NPT.
PAEC	Pakistan Atomic Energy Commission
PINSTECH	Pakistan Institute of Nuclear Science Technology, the site of a US-supplied 5-megawatt "swimming pool"-type reactor installed in the 1960s
Tarapur	The Tarapur nuclear power plant, located near Bombay, was built by the United States. It has a capacity of 600 megawatts and can annually produce 50 to 80 kg of plutonium. Tarapur and its products come under IAEA inspection safeguards.

CITATIONS AND ABSTRACTS

A SELECTIVE, ANNOTATED BIBLIOGRAPHY  
ON CURRENT SOUTH ASIAN ISSUES  
February 1987

"500 MW Prototype Fast Breeder Reactor By 2000." Patriot (New Delhi), 3 January 1987, p. 5.

C.V. Sundaram, Director of the Indira Gandhi Centre for Atomic Research, announced that India had successfully completed a 40 MW (thermal) 13 MW (electrical) fast breeder test reactor, and was working to construct a fully indigenous 500 MW Liquid Metal Fast Breeder Reactor (LMFBR) by the year 2000. He remarked that India was attempting a much larger scale-up factor than other countries had used. Only two countries are currently operating LMFBR's larger than 500 MW: France, with a 1200 MWE Superphenix and the Soviet Union with a 600 MWE BN-600.

"Commentary Views Accord With China." Muslim (Islamabad), 20 September 1986, p. 4. In JPRS-TND-86-024, 3 November 1986, pp. 63-64.

The editorial hails the recent Sino-Pak nuclear agreement as an important step in fostering bilateral relations and in cooperatively exploring a technology that the West has tried to monopolize for itself. The agreement encompasses joint projects in medical, industrial and agricultural uses of nuclear technology, as well as the exploration for nuclear minerals. One of the first industrial applications will involve the use of radio isotopes, while agricultural experts will work together to explore the role of radiation in increasing productivity. All facets of the agreement will be consistent with IAEA safeguards.

The article cites Pakistan's bitter experience in the Chashma nuclear project, in which the West tried repeatedly to block Pakistan's legitimate efforts to increase the nation's power supply.

Fera, Ivan and Srinivasan, Kannan. "Keeping the Nuclear Option Open: What It Really Means." Economic and Political Weekly (Bombay), Vol. XXI, No. 49, 6 December 1986, pp. 2119-2120.

A SELECTIVE, ANNOTATED BIBLIOGRAPHY  
ON CURRENT SOUTH ASIAN ISSUES  
February 1987

The authors contend that the Indian Government, despite its casual "open-options" rhetoric, is moving rapidly to increase its stock of weapons-quality uranium and plutonium. A pilot uranium enrichment plant with about 100 centrifuges was set up at the BARC complex in 1984 and achieved enrichment of less than 2%. Even before this plant had succeeded in its limited mission, the AEC decided to build an industrial scale enrichment plant 50 times the size of the pilot project. The new plant, known as the Rare Materials Plant (RMP), is being built at Ratanhalli, 20 km. from Mysore in Karnataka. Two billion rupees have already been devoted to the project, and the AEC has set up a special purchasing unit to import critical technology from abroad.

Alongside its work in uranium enrichment, the government has been pushing ahead in its production of plutonium. In 1975 the AEC set up the 100 MW Dhruva reactor, specifically designed and operated to produce the maximum possible amount of weapons-grade plutonium. The plant's fuel cycle is geared for 1000 MW days, which is considerably under the level optimal for power production (15,000 MW), but which produces a higher concentration of plutonium 239. When fully operational, Dhruva can produce 25 kgs. of plutonium each year, while a single bomb requires 6.9 kgs.

Aside from Dhruva, the government operates the 40 MW Cirus reactor, which has produced an estimated 60 to 150 kgs. of plutonium since it went critical in 1960. This reactor is outside of international safeguards.

Along with these technical advances, the Gandhi government has been laying the political groundwork to prepare the nation for a more open stance of nuclear preparedness.

"First Neutron Reactor Will go Critical By March Next." Hindu (Madras), 5 December 1986, p. 12.

India's first neutron reactor "Kamini" is being completed at the Indira Gandhi Centre for Atomic Research in Kalpakkam, and is expected to be commissioned in March 1987. The reactor is the first in the world to be fuelled

A SELECTIVE, ANNOTATED BIBLIOGRAPHY  
ON CURRENT SOUTH ASIAN ISSUES  
February 1987

by uranium 233-aluminum alloy, a substance derived from irradiated thorium. India has abundant supplies of thorium, and is using an alloying process that was designed and implemented indigenously. The reactor will operate at 30 kW nominal power, but can be scaled up to 100 kW. It will be used for neutron radiography and material development.

"Nuclear Waste Burial Ground Nearly Complete." Times of India (Bombay), 11 September 1986, p. 12. In JPRS-TND-86-024, 3 November 1986, p. 60.

The Bhabha Atomic Research Center will soon complete the nation's first nuclear graveyard, a "solid storage surveillance facility" near the Tarapur Atomic Power Station outside of Bombay. The facility is an underground vault of steel-lined concrete filled with individual steel tubes, each to house a canister of nuclear waste. The facility is scheduled to be under 24-hour surveillance for the next 25 years, after which the waste will be moved to a more permanent dumping ground. Almost 250,000 litres of highly active waste are waiting to be moved into the facility. Less radioactive material is conventionally stored in concrete trenches around existing nuclear power stations.

Purohit, Radhesyam. "Documentary on Pak Pathway to N-Bomb." Patriot (New Delhi), 17 December 1986, p. 4.

A recent report in the West German media details Pakistan's progress in developing a nuclear weapon. According to claims that appeared first in Stern, Pakistan is likely to explode a nuclear device in 1987, and already has the annual capacity to produce 10 kilograms of enriched uranium, sufficient for one atom bomb each year.

This report confirms earlier stories that the Pakistan Government has been secretly collecting from Europe equipment and blueprints for use in nuclear weaponry. An important contribution to this effort came from Albrecht Migule of Freiburg, a West German engineering firm which

A SELECTIVE, ANNOTATED BIBLIOGRAPHY  
ON CURRENT SOUTH ASIAN ISSUES  
February 1987

provided a plant capable of transforming natural uranium into gaseous uranium hexafluoride. This has permitted Pakistan to make considerable progress in the enrichment of uranium. Another West German company has supplied super-strong maraging steel, while the Pakistan Government has relied on sympathetic Turkish and European nationals to acquire other sensitive technologies.

"Soviets Frown at Pak Bomb Effort." Times of India (Bombay), 24 November 1986, p. 1.

Soviet specialists in international relations announced that the USSR is vigorously opposed to Pakistan's development of a nuclear bomb. Speaking at a press conference organized in conjunction with a visit by General Secretary Gorbachev, these representatives from academic and press circles said that any such attempt by Pakistan would represent a serious violation of existing non-proliferation agreements.

Subrahmanyam, K. (ed). India and The Nuclear Challenge. New Delhi: Lancer International, 1986. U264.I53 1986

Through the work of six different authors in eleven essays, this book attempts to evaluate India's nuclear option, and to assess the economic, political, ethical and strategic factors affecting the choice to develop a nuclear arsenal. The editor, K. Subrahmanyam, is the Director of the Institute for Defence Studies and Analysis (IDSA) in New Delhi, and four of his five co-authors are also IDSA colleagues.

The writers argue that India's military nuclear program has been unnecessarily impeded by a number of serious misconceptions. In particular, they make the following contentions:

- 1) Even a poor developing nation can afford to build nuclear weapons.
- 2) Non-proliferation as devised by the current nuclear powers is detrimental to the interests of the third world.

A SELECTIVE, ANNOTATED BIBLIOGRAPHY  
ON CURRENT SOUTH ASIAN ISSUES  
February 1987

- 3) A bilateral renunciation of nuclear weapons by India and Pakistan would actually undermine regional stability.
- 4) An India without nuclear weapons can not play any significant role in determining the coming economic and political order.

The six authors argue that the development of a credible nuclear arsenal is critical both to India's national interests and to regional stability.

"The Thal Vaishet Heavy Water Plant Has Begun Production."  
Nucleonics Week (New York), Vol. 27, No. 47, 27 November 1986, pp. 2-3.

The Thal Vaishet Heavy Water Plant began production on October 28. The plant has a rated capacity of 110 metric tons of heavy water per year, and uses synthetic ammonia gas as feedstock. This is India's fifth operating heavy water plant. Of the other four, Baroda, Tuticorin and Kota are operating satisfactorily, but Talcher was closed down by a fire earlier this year.

"Uranium Deposits In U.P. Found." India News (Washington), Vol. XXV, No. 37, 8 December 1986, p. 2.

Considerable reserves of uranium have been found in three districts of Uttar Pradesh. According to the Geological Survey of India, Tehri-Garhwal, Dehran Dun and Saharanpur districts have shown evidence of major uranium deposits, and will be subject to further exploration.

## 2. TACTICS AND ORGANIZATION OF THE AFGHAN RESISTANCE

## GLOSSARY OF TERMS

Commander	A resistance fighter who is recognized as a military leader in local or regional areas of conflict; some commanders are respected outside their own regions, but there is not yet a coordinated, nationwide, insurgent command in Afghanistan. The title commander is the only honorific or rank recognized by the resistance movement.
Dushmani	(singular: <u>dushman</u> ) Soviet pejorative term for Afghan insurgents; it means "bandit" and originated during the 1930s Central Asia resistance.
DRA	The Democratic Republic of Afghanistan was established as the result of a coup led by Mohammad Nur Taraki and Hafizullah Amin in April 1978. Deteriorating internal security led to military intervention by the Soviet Union in December 1979 and Amin was killed by the invading troops. The Soviet invasion transformed armed resistance toward the modernistic but arbitrary reforms of Taraki and Amin into a war of national liberation.
KHAD	DRA intelligence service whose operations are entirely directed by its many Soviet KGB advisors. The acronym stands for Khedmat-Etala'at-e-Daulati (State Information Service). KHAD received ministerial rank in January 1986.
Mujahideen	(singular: <u>mujahid</u> ) This Islamic term means "holy warrior," but it is most often used as a name for Afghanistan's resistance fighters, who consider their campaign a <u>jiha</u> d (holy war) to drive unbelievers from their country.
Spetznaz	Soviet special warfare troops under the GRU (Military Intelligence Directorate) of the Soviet Ministry of Defense. These highly mobile units are deployed throughout Afghanistan for operations which require more skill or loyalty than is commonly displayed by Soviet or DRA troops.

CITATIONS AND ABSTRACTS

A SELECTIVE, ANNOTATED BIBLIOGRAPHY  
ON CURRENT SOUTH ASIAN ISSUES  
February 1987

Bohlen, Celestine. "Soviets Conclude Kabul Visit." Washington Post, 8 January 1987, p. A34.

Following the high level visit by Soviet Foreign Minister Eduard Shevardnadze and senior Kremlin foreign policy adviser Anatoliy Dobrynin to Kabul, Tass announced that the Soviet Union has pledged its "constructive cooperation to achieve a political settlement in the Afghan war." Tass also mentioned that Moscow would honor whatever schedule for the withdrawal of Soviet troops which was agreed to at the UN-sponsored talks. Shevardnadze, in an interview in Kabul, however, disputed assertions that a Soviet troop withdrawal is the key to a political settlement. Echoing the official justification for Soviet military presence in Afghanistan, he said that a withdrawal "depends primarily on an end to outside interference and on guarantees of its nonresumption." He also expressed hopes that all sides would support the cease-fire proposal advanced by Najibullah as part of his national reconciliation plan announced on 1 January 1987.

"Destitution du Ministre des Affaires Etrangeres." Le Monde (Paris), 6 December 1986, p. 9.

Radio Kabul announced on December 4 that Shah Mohammad Dost was dismissed from his position as Foreign Minister and would be reassigned to the United Nations as the DRA's permanent representative. The official radio also mentioned that Abdul Wakil was named as Dost's successor. The broadcast also stated that Mohammad Rafi resumed his old position of Minister of Defence, which he relinquished in 1981 to General Abdul Qader. Qader has recently been appointed ambassador to Poland.

Erulkar, Matthew D. "Why America Should Recognize the Afghan Resistance." Washington Post, 13 January 1987, p. A23.

The author takes exception to a 17 December Washington Post editorial, "The Afghan Resistance," because it supports the continued recognition of the DRA in international forums. Ostensibly such recognition would publicly expose the Afghan government as a brutal puppet

A SELECTIVE, ANNOTATED BIBLIOGRAPHY  
ON CURRENT SOUTH ASIAN ISSUES  
February 1987

government. The author feels, however, that this would only perpetuate the fiction that the DRA, and not the Soviet Union, is in control of Afghanistan's destiny.

Sada, Hugo. "A la Recherche d'Allies Africains." Jeune Afrique, 14 January 1987, p. 47.

Professor Burhanuddin Rabbani has become the principal spokesman of the Resistance. He is acting like an ambassador, launching a diplomatic offensive to get the allegiance of the Third World. On his trip to Africa between 5 and 11 December, he was received by three presidents: Omar Bongo of Gabon; Seiny Kountche of Niger; and Abdou Diouf of Senegal. Rabbani's trip was in part to gain additional support for the resistance in the upcoming Islamic Summit hosted by Kuwait in late January. Rabbani, interviewed by the author, said he told his African hosts that there was a parallel between the struggle against apartheid and the mujahed fight against Soviet enslavement.

Weintraub, Richard M. "Afghan Refugees Look Homeward." Washington Post, 4 February 1987, pp. A17, A19.

After years of forced residence in Pakistan, many Afghan refugees are dreaming of returning home. They have come to realize that the welcome they initially received by their Pakistani hosts is becoming strained. The presence of an estimated 3 million refugees in the politically volatile and economically depressed North West Frontier Province is increasingly problematic. The author, having interviewed residents of the Monda Camp refugee camp, discerns a hesitant but pervasive hope voiced here--that the recent UN-sponsored proximity talks between Pakistan and Afghanistan may soon yield a political settlement to the war. The author notes, however, that the sentiments of "jihad" or holy war, have not lessened in anticipation of such an agreement. Bitterness toward the Soviet occupiers and their DRA puppets has not diminished and their removal is a constant and unchanging refugee demand.

A SELECTIVE, ANNOTATED BIBLIOGRAPHY  
ON CURRENT SOUTH ASIAN ISSUES  
February 1987

Weintraub, Richard M. "Pakistanis Hear Views of U.S., Soviet Envoys." Washington Post, 21 January 1987, p. A81.

Undersecretary of State Michael H. Armacost departed Islamabad 20 January after completing intensive talks with Pakistani leaders. The author speculates that the visit, while officially portrayed as routine, was geared toward convincing Pakistan not to accept too readily Moscow's declaration that it has markedly changed its Afghan policy. Armacost stated before leaving Pakistan that it is Soviet "deeds that count, and the deed that is most important is the withdrawal of Soviet troops." Soviet diplomats told observers that First Deputy Foreign Minister Anatoly Kovalyev's arrival in Islamabad only a few hours after Armacost left was merely "coincidental".

Weintraub, Richard M. "Pakistanis Read Moscow's Signals as Effort to End Afghan War." Washington Post, 30 January 1987, pp. A23, A24.

The author observes that diplomatic observers of the Afghan conflict are shifting their focus from the timetable of a Soviet troop withdrawal to the more complicated question of what kind of government the Soviets would be willing to leave behind. Such a shift implies a modicum of optimism that the struggle can be resolved. The author cautions that the Pakistanis who are under economic and political duress, due in part to the presence of 3 million Afghan refugees, may be more willing than the United States to accept a Soviet compromise. An imminent visit by Pakistani Foreign Minister Shahabzada Yaqub Khan to Moscow may elicit further Soviet clarifications as to its intentions.